

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/94/947A

CRF Processing Date: 2/19/2002

Edited by: AK

Verified by: AK (STIC staff)

**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



OIPE

## RAW SEQUENCE LISTING

DATE: 02/19/2002

PATENT APPLICATION: US/09/941,947A

TIME: 13:19:23

Input Set : N:\Crf3\02102002\I941947A.raw

Output Set: N:\CRF3\02192002\I941947A.raw

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1 <110> APPLICANT: Brzostowicz, Patricia C.
2 Cheng, Qiong
3 DiCosimo, Deana J.
4 Koffas, Mattheos
5 Miller, Edward S. Jr.
6 Odom, J. Martin
7 Picataggio, Steve
8 Rouviere, Pierre E.
9 <120> TITLE OF INVENTION: CAROTENOID PRODUCTION FROM A SINGLE CARBON SOURCE
10 <130> FILE REFERENCE: CL1903 US NA
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/941,947A
12 <141> CURRENT FILING DATE: 2001-09-01
13 <150> PRIOR APPLICATION NUMBER: 60/229,907
14 <151> PRIOR FILING DATE: 2000-09-01
15 <150> PRIOR APPLICATION NUMBER: 60/229,858
16 <151> PRIOR FILING DATE: 2000-09-01
17 <160> NUMBER OF SEQ ID NOS: 60
18 <170> SOFTWARE: Microsoft Office 97
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 1311
22 <212> TYPE: DNA
23 <213> ORGANISM: Methylobacterium 16a
24 <400> SEQUENCE: 1
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27 ggcggcttg ggccttggtt gaattccgca atcggtagtt tgatcgaaac ttataccgaa 180
28 atcgatccta gcatagaaat catttgctat cgcggcggtt ataaaggcct gttgctgggc 240
29 gattcttata cagtaacggc cgaagtgcgt aaaaaggcgg gtgttctgca acgttttggc 300
30 ggttctgtga tcggcaacag ccgcgtcaaa ttgaccaatg tcaaagactg cgtgaaacgc 360
31 gggttggtca aagagggtga agatccgcaa aaagtgcggg ctgatcaatt ggttaaggat 420
32 ggtgtcgata ttctgcacac catcgcgggc gatgatacca atacggcagc agcggatttg 480
33 gcagcattcc tggccagaaa taattacgga ctgacggtca ttggtttacc taaaaccgtc 540
34 gataacgacg tatttccgat caagcaatca ctagggtgct ggactgccgc cgagcaaggc 600
35 gcgcgttatt tcatgaacgt ggtggccgaa aacaacgcca acccagcat gctgatcgta 660
36 cacgaagtga tgggccgtaa ctgcggctgg ctgaccgctg caaccgcgca ggaatatcgc 720
37 aaattactgg accgtgccga gtggttgccg gaattgggtt tgactcgtga atcttatgaa 780
38 gtgacgcggg tattcgttcc ggaaatggcg atcgacctg aagccgaagc caagcgctg 840
39 cggaagtga tggacaaagt cgattgcgtc aacatcttcg tttccgaagg tgccggcgtc 900
40 gaagctatcg tcgcggaaat gcaggccaaa ggcagggaag tgccgcgcga tgcgttcggc 960
41 cacatcaaac tggatgcggt caacctggtt aaatggttcg gcgagcaatt cgcgcagatg 1020
42 ataggcgcgg aaaaaacctt ggtacaaaaa tcgggatact tcgcccgtgc ttctgcttcc 1080
43 aacgttgacg acatgcgttt gatcaaatcg tgccgcgact tggcggtcga gtgcgcgttc 1140
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Output Set: N:\CRF3\02192002\I941947A.raw

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50 <212> TYPE: PRT
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52 <400> SEQUENCE: 2
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55      His Trp Phe Phe Leu Asn Phe Asn Phe Tyr Thr Leu Met Asn Lys Pro
56      20 25 30
57      Lys Lys Val Ala Ile Leu Thr Ala Gly Gly Leu Ala Pro Cys Leu Asn
58      35 40 45
59      Ser Ala Ile Gly Ser Leu Ile Glu Arg Tyr Thr Glu Ile Asp Pro Ser
60      50 55 60
61      Ile Glu Ile Ile Cys Tyr Arg Gly Gly Tyr Lys Gly Leu Leu Leu Gly
62      65 70 75 80
63      Asp Ser Tyr Pro Val Thr Ala Glu Val Arg Lys Lys Ala Gly Val Leu
64      85 90 95
65      Gln Arg Phe Gly Gly Ser Val Ile Gly Asn Ser Arg Val Lys Leu Thr
66      100 105 110
67      Asn Val Lys Asp Cys Val Lys Arg Gly Leu Val Lys Glu Gly Glu Asp
68      115 120 125
69      Pro Gln Lys Val Ala Ala Asp Gln Leu Val Lys Asp Gly Val Asp Ile
70      130 135 140
71      Leu His Thr Ile Gly Gly Asp Asp Thr Asn Thr Ala Ala Ala Asp Leu
72      145 150 155 160
73      Ala Ala Phe Leu Ala Arg Asn Asn Tyr Gly Leu Thr Val Ile Gly Leu
74      165 170 175
75      Pro Lys Thr Val Asp Asn Asp Val Phe Pro Ile Lys Gln Ser Leu Gly
76      180 185 190
77      Ala Trp Thr Ala Ala Glu Gln Gly Ala Arg Tyr Phe Met Asn Val Val
78      195 200 205
79      Ala Glu Asn Asn Ala Asn Pro Arg Met Leu Ile Val His Glu Val Met
80      210 215 220
81      Gly Arg Asn Cys Gly Trp Leu Thr Ala Ala Thr Ala Gln Glu Tyr Arg
82      225 230 235 240
83      Lys Leu Leu Asp Arg Ala Glu Trp Leu Pro Glu Leu Gly Leu Thr Arg
84      245 250 255
85      Glu Ser Tyr Glu Val His Ala Val Phe Val Pro Glu Met Ala Ile Asp
86      260 265 270
87      Leu Glu Ala Glu Ala Lys Arg Leu Arg Glu Val Met Asp Lys Val Asp
88      275 280 285
89      Cys Val Asn Ile Phe Val Ser Glu Gly Ala Gly Val Glu Ala Ile Val
90      290 295 300
91      Ala Glu Met Gln Ala Lys Gly Gln Glu Val Pro Arg Asp Ala Phe Gly
92      305 310 315 320
93      His Ile Lys Leu Asp Ala Val Asn Pro Gly Lys Trp Phe Gly Glu Gln
94      325 330 335

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Input Set : N:\Crf3\02102002\I941947A.raw

Output Set: N:\CRF3\02192002\I941947A.raw

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95   Phe Ala Gln Met Ile Gly Ala Glu Lys Thr Leu Val Gln Lys Ser Gly
96               340               345               350
97   Tyr Phe Ala Arg Ala Ser Ala Ser Asn Val Asp Asp Met Arg Leu Ile
98               355               360               365
99   Lys Ser Cys Ala Asp Leu Ala Val Glu Cys Ala Phe Arg Arg Glu Ser
100          370               375               380
101   Gly Val Ile Gly His Asp Glu Asp Asn Gly Asn Val Leu Arg Ala Ile
102          385               390               395               400
103   Glu Phe Pro Arg Ile Lys Gly Gly Lys Pro Phe Asn Ile Asp Thr Asp
104               405               410               415
105   Trp Phe Asn Ser Met Leu Ser Glu Ile Gly Gln Pro Lys Gly Gly Lys
106               420               425               430
107   Val Glu Val Ser His
108               435
110 <210> SEQ ID NO: 3
111 <211> LENGTH: 636
112 <212> TYPE: DNA
113 <213> ORGANISM: Methylomonas 16a
114 <400> SEQUENCE: 3
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116   atgggtcatca atcatctgga acatgccgtc cctctgggtc gcgcgctagt cgacgggtggc      120
117   ttgaaagttt tggagatcac attgcgcacg cgggtggcac tggaaatgtat ccgacgtatc      180
118   aaagccgaag tacccggacgc catcgtcggc gcgggcacca tcatcaaccc tcataccttg      240
119   tatcaagcga ttgacgccgg tgccggaattc atcgtcagcc ccggcatcac cgaaaatcta      300
120   ctcaacgaag cgttagcatc cggcgtgcct atcctgcccg gcgtcatcac acccagcgag      360
121   gtcattgcgtt tattggaaaa aggcattcaat gcgatgaaat tctttccggc tgaagccgcc      420
122   ggccggcatc cgatgctgaa atcccttggc ggcccttgc cgcaagtac cttctgtccg      480
123   accggcgccg tcaatcccaa aaacgcgccc gaatatctgg cattgaaaaa tgtgcgctgc      540
124   gtccggcggt cctggatggc gccggccgat ctggtagatg ccgaagactg ggccggaaatc      600
125   acgcggcggg cgagcgaggc cgcggcattg aaaaaa      636
127 <210> SEQ ID NO: 4
128 <211> LENGTH: 212
129 <212> TYPE: PRT
130 <213> ORGANISM: Methylomonas 16a
131 <400> SEQUENCE: 4
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133   1               5               10               15
134   Val Met Pro Val Met Val Ile Asn His Leu Glu His Ala Val Pro Leu
135          20               25               30
136   Ala Arg Ala Leu Val Asp Gly Gly Leu Lys Val Leu Glu Ile Thr Leu
137          35               40               45
138   Arg Thr Pro Val Ala Leu Glu Cys Ile Arg Arg Ile Lys Ala Glu Val
139          50               55               60
140   Pro Asp Ala Ile Val Gly Ala Gly Thr Ile Ile Asn Pro His Thr Leu
141          65               70               75               80
142   Tyr Gln Ala Ile Asp Ala Gly Ala Glu Phe Ile Val Ser Pro Gly Ile
143          85               90               95
144   Thr Glu Asn Leu Leu Asn Glu Ala Leu Ala Ser Gly Val Pro Ile Leu
145          100              105              110

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DATE: 02/19/2002

PATENT APPLICATION: US/09/941,947A

TIME: 13:19:23

Input Set : N:\Crf3\02102002\I941947A.raw

Output Set: N:\CRF3\02192002\I941947A.raw

146	Pro Gly Val Ile Thr Pro Ser Glu Val Met Arg Leu Leu Glu Lys Gly	
147	115 120 125	
148	Ile Asn Ala Met Lys Phe Phe Pro Ala Glu Ala Ala Gly Gly Ile Pro	
149	130 135 140	
150	Met Leu Lys Ser Leu Gly Gly Pro Leu Pro Gln Val Thr Phe Cys Pro	
151	145 150 155 160	
152	Thr Gly Gly Val Asn Pro Lys Asn Ala Pro Glu Tyr Leu Ala Leu Lys	
153	165 170 175	
154	Asn Val Ala Cys Val Gly Gly Ser Trp Met Ala Pro Ala Asp Leu Val	
155	180 185 190	
156	Asp Ala Glu Asp Trp Ala Glu Ile Thr Arg Arg Ala Ser Glu Ala Ala	
157	195 200 205	
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159	210	
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163	<212> TYPE: DNA	
164	<213> ORGANISM: Methylobionas 16a	
165	<400> SEQUENCE: 5	
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167	gcgctgtcca aggaccagct ccagcaactg gctgacgagg tgcgcggcta tctgaccac	120
168	acggtcagca tttccggcgg ccattttgcg gccggcctcg gcaccgtgga actgaccgtg	180
169	gccttgcat atgtgttcaa taccctcgtc gatcagttgg tctgggaagt gggccatcag	240
170	gcctatccgc acaagattct gaccggtcgc aaggagcgca tgccgaccat tcgcacctg	300
171	ggcgggggtg cagcctttcc ggccggggac gagagcgaa acgatgcctt cggcgctcggc	360
172	tattccagca cctcgatcag cgcggcactg ggcattggcca ttgcgtcgca gctgcgcggc	420
173	gaagacaaga agatggtagc catcatcggc gacggttcca tcaccggcgg catggcctat	480
174	gaggcgatga atcatgccgg cgatgtgaat gccaacctgc tggatgatctt gaacgacaac	540
175	gatattgtga tctgcgcgcc ggtcggggcg atgaacaatt atctgaccaa ggtgttgctg	600
176	agcaagtttt attcgtcggg gcgggaagag agcaagaaag ctctggccaa gatgccgtcg	660
177	gtgtgggaac tggcgcgcaa gaccgaggaa cacgtgaagg gcatgatcgt gcccggtacc	720
178	ttgttcgagg aattgggctt caattatttc ggcccgatcg acggccatga tgcgagatg	780
179	ctggtgtcga ccctggaaaa tctgaaggat ttgaccgggc cggatattcct gcatgtggtg	840
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182	tataccgagg tggtcggcgg ctggctgtgc gacatggcgg ctcaagacga gcgcttgctg	1020
183	ggcatcacgc cggcgatgcg cgaaggctct ggtttggtgg aattctcaca gaaatttccg	1080
184	aatcgctatt tcgatgtcgc catcgccgag cagcatgcgg tgacctggc cgcgggccaag	1140
185	gcctgccagg gcgccaagcc ggtggtggcg atttattcca ccttcctgca acgcgggttac	1200
186	gatcagttga tccacgacgt ggccttgacg aacttagata tgctctttgc actggatcgt	1260
187	gccggcttgc tcggcccggg tgaccgacc catgctggcg cctttgatta cagctacatg	1320
188	cgctgtattc cgaacatgct gatcatggct ccagccgacg agaacgagtg caggcagatg	1380
189	ctgaccaccg gcttccaaca ccatggcccg gcttcggtgc gctatccgcg cggcaaaagg	1440
190	cccggggcgg caatcgatcc gaccctgacc gcgctggaga tcggcaaggc cgaagtcaga	1500
191	caccacggca gccgcacgc cattctggcc tggggcagca tggtcacgcc tgccgtcgaa	1560
192	gccggcaagc agctgggcgc gacgggtggtg aacatgcgtt tcgtcaagcc gttcgatcaa	1620
193	gccttggtgc tggaattggc caggacgcac gatgtgttcg tcaccgtcga ggaaaacgtc	1680
194	atcgccggcg gcgctggcag tgcgatcaac accttccctg aggcgcagaa ggtgctgatg	1740
195	ccggtctgca acatcgccct gcccgaccgc ttcgtcgagc aaggtagtcg cgagggaattg	1800



OIPE

## RAW SEQUENCE LISTING

DATE: 02/10/2002

PATENT APPLICATION: US/09/941,947A

TIME: 13:19:55

Input Set : A:\CL1903 US NA revised seq list .txt

Output Set: N:\CRF3\02102002\I941947A.raw

**Does Not Comply**  
**Corrected Diskette Needed**

3 <110> APPLICANT: Brzostowicz, Patricia C.  
 4 Cheng, Qiong  
 5 DiCosimo, Deana J.  
 6 Koffas, Mattheos  
 7 Miller, Edward S. Jr.  
 8 Odom, J. Martin  
 9 Picataggio, Steve  
 10 Rouviere, Pierre E.  
 14 <120> TITLE OF INVENTION: CAROTENOID PRODUCTION FROM A SINGLE CARBON SOURCE  
 18 <130> FILE REFERENCE: CL1903 US NA  
 21 <140> CURRENT APPLICATION NUMBER: US/09/941,947A  
 21 <141> CURRENT FILING DATE: 2001-09-01  
 21 <150> PRIOR APPLICATION NUMBER: 60/229,907  
 22 <151> PRIOR FILING DATE: 2000-09-01  
 24 <150> PRIOR APPLICATION NUMBER: 60/229,858  
 25 <151> PRIOR FILING DATE: 2000-09-01  
 27 <160> NUMBER OF SEQ ID NOS: 60  
 29 <170> SOFTWARE: Microsoft Office 97

## ERRORED SEQUENCES

3085 <210> SEQ ID NO: 60  
 3086 <211> LENGTH: 19  
 3087 <212> TYPE: DNA  
 3088 <213> ORGANISM: Artificial Sequence  
 3090 <220> FEATURE:  
 3091 <223> OTHER INFORMATION: primer  
 3093 <400> SEQUENCE: 60  
 3094 tagctcgagt cacgcttgc

19

E--> 3097 52 delete

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/941,947A

DATE: 02/10/2002

TIME: 13:19:56

Input Set : A:\CL1903 US NA revised seq list .txt

Output Set: N:\CRF3\02102002\I941947A.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application No

L:21 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:3097 M:254 E: No. of Bases conflict, LENGTH:Input:52 Counted:19 SEQ:60

US 0994194708P1



Creation date: 28-08-2003  
Indexing Officer: FPLUMMER - FRANCIS PLUMMER  
Team: OIPEBackFileIndexing  
Dossier: 09941947

Legal Date: 27-09-2002

No.	Doccode	Number of pages
1	IDS	3
2	NPL	3

Total number of pages: 6

Remarks:

Order of re-scan issued on .....